

MADERA COUNTY

PUBLIC HEALTH MICROBIOLOGIST

DEFINITION

Under direction, to perform a variety of complex public health laboratory analytical procedures; to prepare reports on test results; to serve as a resource person for laboratory testing to the public and community agencies; to do related work as required.

SUPERVISION EXERCISED

May exercise technical and functional supervision over lower level staff.

EXAMPLES OF IMPORTANT AND ESSENTIAL DUTIES

Performs a wide variety of public health laboratory testing and analytical procedures; performs immunological tests on human sera for evidence of communicable diseases; processes and cultures specimens for isolation and identification of bacterial, parasitic, and mycological organisms; performs microscopic and darkfield examinations; performs microbiological and chemical examinations of food, water, and other substances impacting environmental sanitation; determines the presence or absence of disease organisms through physiological and/or biochemical tests; performs laboratory virological procedures; performs proficiency tests on simulated specimens for quality control of laboratory procedures and equipment; identifies and confirms the identity of cultures submitted by other laboratories; processes and cultures specimens for isolation and identification; prepares reports; orders and prepares testing media, stains, and reagents; performs and analyzes comparison studies of alternate methods and testing procedures; inputs test results into the data processing system; serves as a resource person, answering questions regarding test methods and results for physicians, nurses, and medical technicians; serves as a resource person on laboratory matters for the public and community agencies; attends technical meetings and professional organizations; serves as the Public Health Laboratory Director upon the request or absence of the Public Health Laboratory Director .

OTHER JOB RELATED DUTIES

Performs related duties and responsibilities as assigned.

JOB RELATED AND ESSENTIAL QUALIFICATIONS

Knowledge of:

- General chemical, biological, and physical laboratory testing methods and procedures, including qualitative and quantitative analysis.
- Common causes of diseases and methods of transmission and control.
- Principles and methods of scientific research and theories.
- Sampling techniques and statistical analysis.
- Care and maintenance of laboratory equipment.
- Laboratory and work safety methods and procedures.
- Federal, State, and local laws governing public health laboratory functions and testing.
- Public health problems and issues and their impact on a public health laboratory.
- Characteristics and problems involved with public health laboratory testing.

Skill to:

Operate modern office equipment including computer equipment.
Operate analytical instruments and equipment skillfully and safely.

Ability to:

Learn, interpret, and apply the policies, procedures, laws, codes, and regulations governing Public Health laboratory functions and testing.
Learn public health problems and issues and their impact on a public health laboratory.
Learn characteristics and problems involved with Public Health laboratory testing.
Perform general laboratory testing and analytical procedures.
Draw sound conclusions from laboratory analytical data, making appropriate recommendations regarding test results.
Maintain accurate records and prepare comprehensive reports.
Effectively represent the Public Health Laboratory and Health Department to the public, community organizations, and other government agencies.
Communicate clearly and concisely, both orally and in writing.
Establish, maintain, and foster positive and harmonious working relationships with those contacted in the course of work.
Perform the full range of public health laboratory testing and analytical procedures.

Experience and Training Guidelines:

Any combination equivalent to experience and training that would provide the required knowledge, skills, and abilities would be qualifying. A typical way to obtain the knowledge, skills, and abilities would be:

Experience:

Some experience in a laboratory performing testing and analysis.

Training:

Equivalent to a Bachelor's degree from an accredited college or university with major course work in chemistry, microbiology, biology, biochemistry or a related field.

License or Certificate:

Possession of a valid Public Health Microbiologist Certificate issued by the State of California Department of Health Services.

Special Requirements:

Essential duties require the following physical skills and work environment:

Ability to sit, stand, walk, kneel, crouch, stoop, squat, and lift 50 lbs.; exposure to chemicals, explosive materials, and biological hazards.

Effective Date: August 2003